

# DRESDEN DRIVE INTERSECTION IMPROVEMENT ANALYSIS



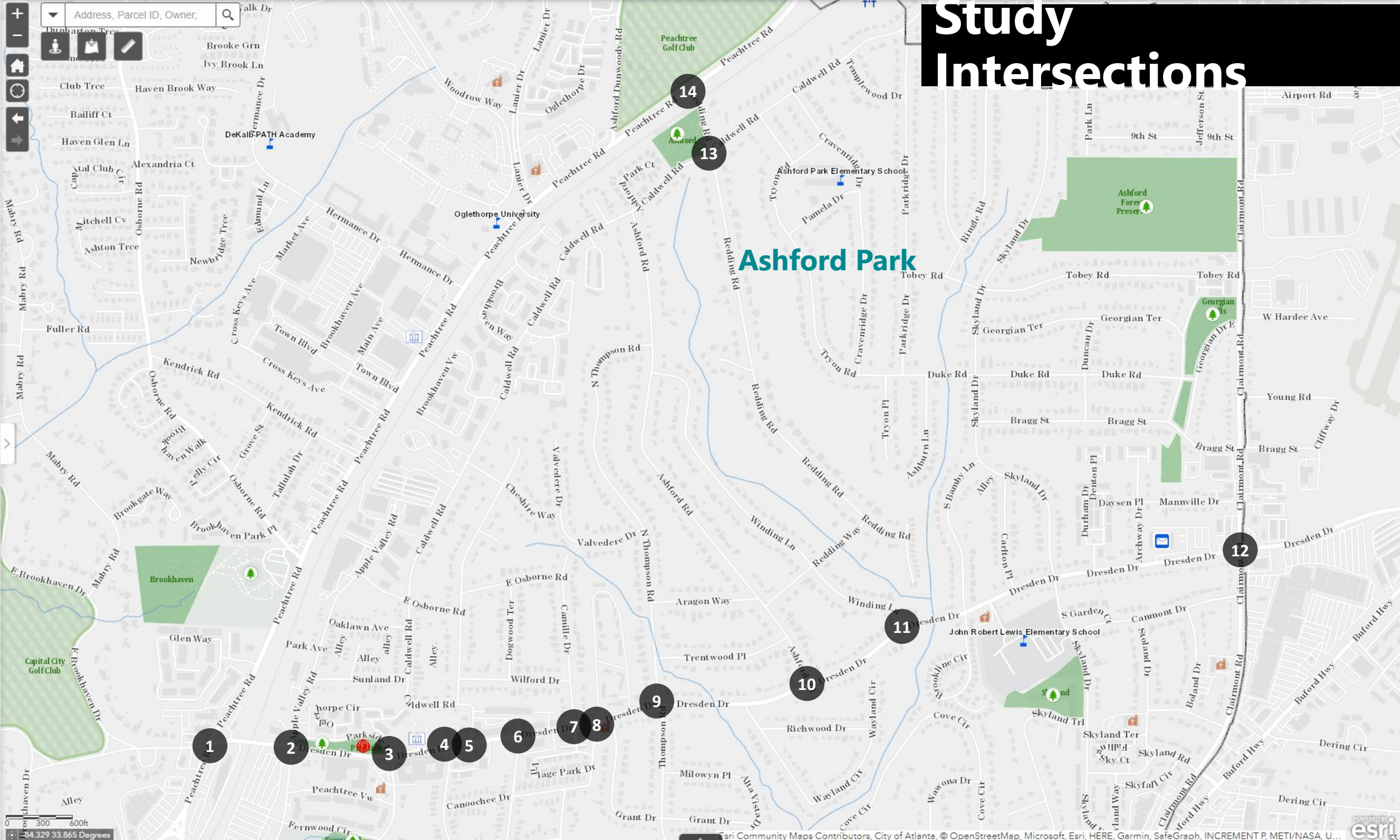
**Traffic Study Update - Assumptions**

**December 13, 2021**

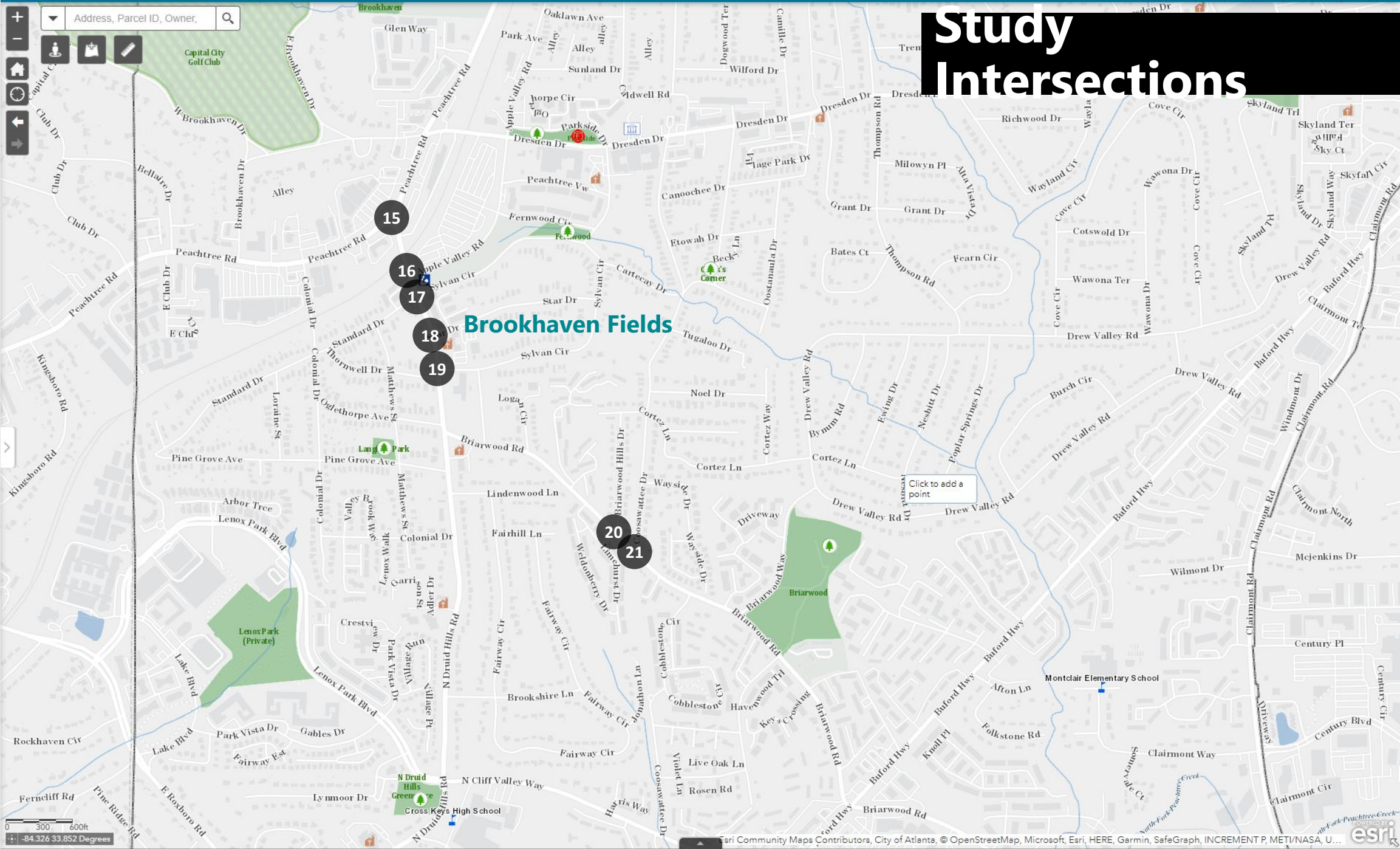
# Study Intersections

1. Dresden Dr at Peachtree Rd
2. Dresden Dr at Apple Valley Rd
3. Dresden Dr at Fernwood Cir
4. Dresden Dr at Ellijay Dr
5. Dresden Dr at Caldwell Rd
6. Dresden Dr at Appalachee Dr
7. Dresden Dr at Camille Dr
8. Dresden Dr at Conasauga Ave
9. Dresden Dr at North Thompson Rd
10. Dresden Dr at Ashford Rd
11. Dresden Dr at Winding Ln
12. Dresden Dr at Clairmont Rd
13. Redding Rd at Caldwell Rd
14. Redding Rd at Peachtree Rd
15. North Druid Hills Rd at Peachtree Rd
16. North Druid Hills Rd at Apple Valley Rd
17. North Druid Hills Rd at Sylvan Cir (N)
18. North Druid Hills Rd at Star Dr
19. North Druid Hills Rd at Sylvan Cir (S)
20. Briarwood Rd at Briarwood Hills Dr
21. Briarwood Rd at Coosawattee Dr

# Study Intersections



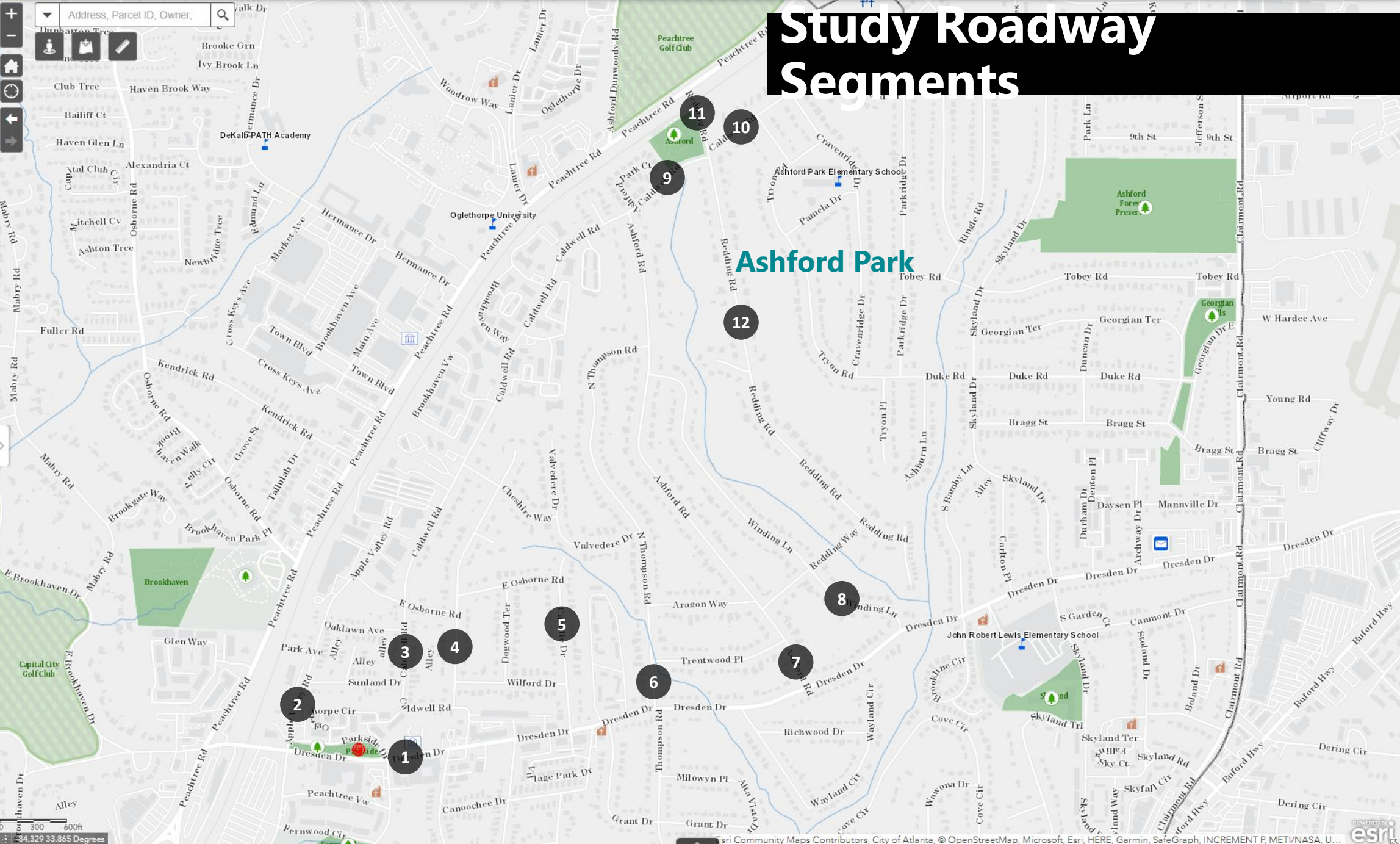
# Study Intersections

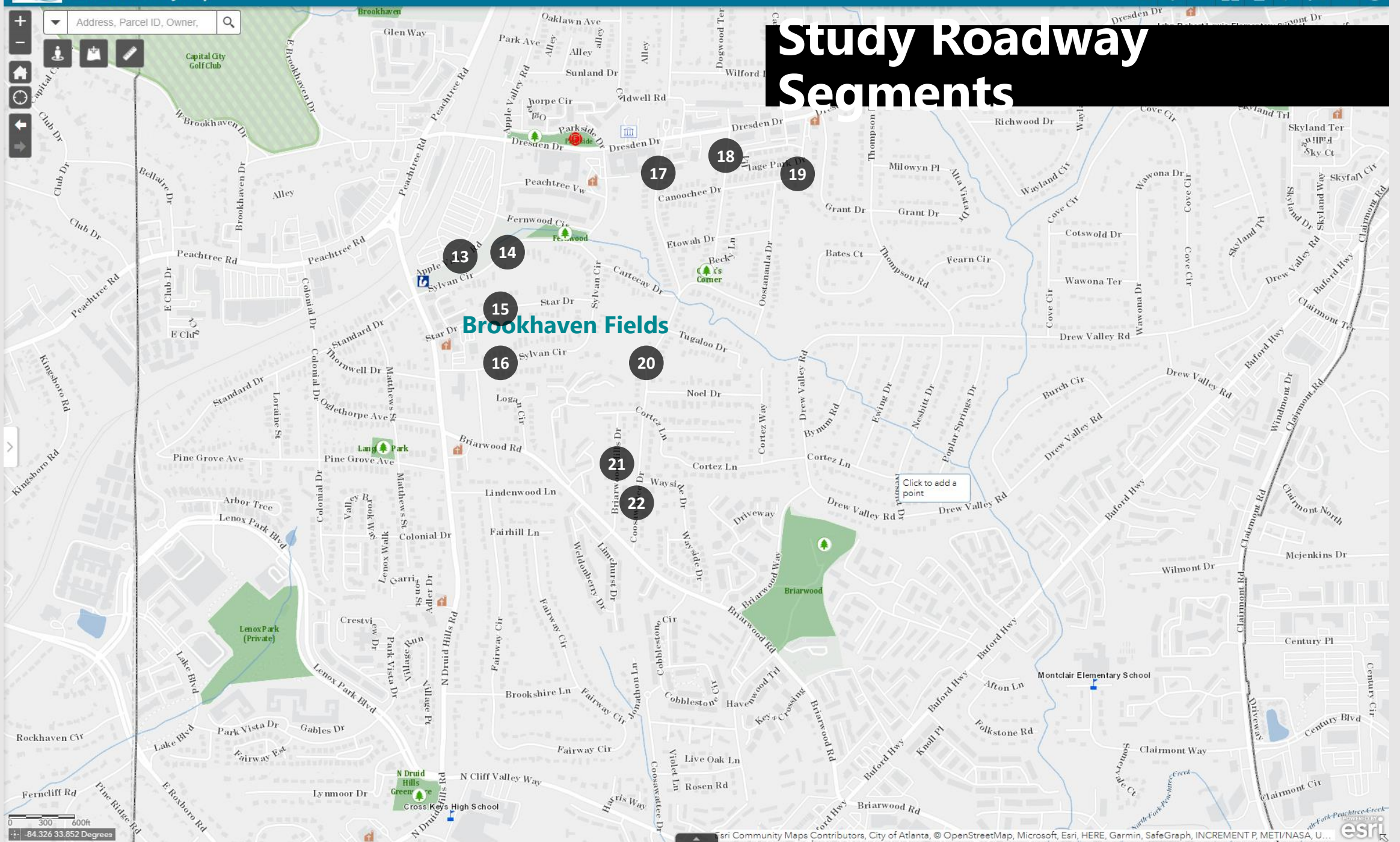


# Study Roadway Segments

1. Dresden Dr between Peachtree Rd and Clairmont Rd
2. Apple Valley Rd between Parkside Dr and Sunland Dr
3. Caldwell Rd between Sunland Dr and Oaklawn Ave
4. Green Meadows Ln between Wilford Dr and East Osborne Rd
5. Camille Dr between Wilford Dr and E Osborne Rd
6. North Thompson Rd between Dresden Dr and Trentwood Pl
7. Ashford Rd between Dresden Dr and Trentwood Pl
8. Winding Ln between Dresden Dr and Redding Way
9. Caldwell Rd between Ashford Rd and Redding Rd
10. Caldwell Rd between Cynthia Dr and Redding Rd
11. Redding Rd between Caldwell Rd and Peachtree Rd
12. Redding Rd between Caldwell Rd and Redding Way
13. Apple Valley Rd between North Druid Hills Rd and Fernwood Cir
14. Sylvan Cir (N) between North Druid Hills Rd and Fernwood Cir
15. Star Dr between North Druid Hills Rd and Sylvan Cir
16. Sylvan Cir (S) between North Druid Hills Rd and Star Dr
17. Ellijay Dr between Towne Estates Dr and Canoochee Dr
18. Appalachee Dr between Dresden Dr and Canoochee Dr
19. Conasauga Ave between Dresden Dr and Oostanaula Dr
20. Coosawattee Dr between Tugaloo Dr and Noel Dr
21. Briarwood Hills Dr between Briarwood Rd and Telford Dr
22. Coosawattee Dr between Briarwood Rd and Wayside Dr

# Study Roadway Segments





# Traffic Counts

- New 2022 turning movement counts at all study intersections (2 hours in the AM and 2 hours in the PM)
- New 2022 24-hour classification and speed counts at all study roadway segments
- COVID adjustment to be applied to 2022 counts
  - Based on comparing available 2016 counts and newly collected counts
  - AM Peak Hour = 125%
  - PM Peak Hour = 115%

# Traffic Volume Projections

- Recent historical growth
  - Based on GDOT's historical traffic count data = 1.3% annual
- Expected future growth
  - Based on Atlanta Regional Commission's (ARC) travel demand model = 0.6% annual
  - Based on ARC's population projections = 1.0% annual
- Growth Scenarios
  - Low = 0.50% annual + Development traffic
  - Medium = 0.75% annual + Development traffic
  - High = 1.00% annual + Development traffic

# Development Assumptions

| Dresden Corridor Traffic Study 2021 - Development Assumptions  |              |  |                  |                    |                              |                                 |                |             |       |
|--|--------------|--|------------------|--------------------|------------------------------|---------------------------------|----------------|-------------|-------|
| Property   | Acres        | Source of estimates  | Will be built by | Apartments/ Condos | Townhomes and detached homes | Retail (incl restaurants) sq ft | Office sq ft   | Hotel rooms | Other |
| MARTA  | 17.76        | MARTA TOD Visioning Study completed by TSW (2019)  | 2026             | 196                | 32                           | 140,000                         | 936,000        | 225         |       |
| PR-3-zoned Properties at North End of Apple Valley (2678-2776 Caldwell Road; 2697-2755 Apple Valley Road; 2580-2587 East Osborne Road) | 20.84        | Apple Valley Entertainment District Feasibility Study completed by ULI Atlanta Center for Leadership (2020)                | 2026             | 250                |                              | 101,700                         | 31,500         | 70          |       |
| 1411, 1417, 1423, & 1427 Dresden Drive (Common Name: Terwilliger-Pappas)   | 2.03         | PR-2 regulations. Estimate 20-25 units/acre.   | 2026             | 50                 |                              | 25,054                          |                |             |       |
| 1336, 1342, 1350, 1358, 1364, 1370, and 1376 Dresden Drive; 2536, 2544, 2552, and 2562 Caldwell Road (Common Name: Dresden Village)    | 4.00         | Square footage estimate as of January 2021 draft provided by Connolly; not formally submitted at this time but anticipated | 2026             | 177                | 7                            | 26,601                          |                |             |       |
| University Baptist Church  | 1.48         | PR-2 regulations. Estimate 20-25 units/acre  | 2026             | 36                 |                              | 18,266                          |                |             |       |
| <b>Grand Total</b>   | <b>46.11</b> |  |                  | <b>709</b>         | <b>39</b>                    | <b>311,621</b>                  | <b>967,500</b> | <b>295</b>  |       |
| <b>These are just assumptions about what is likely to be built. These assumptions represent neither:</b>                               |              |  |                  |                    |                              |                                 |                |             |       |
| <b>1. a commitment from the City to endorse or approve these projects, nor</b>   |              |  |                  |                    |                              |                                 |                |             |       |
| <b>2. the wishes of the surrounding community that requested the traffic study.</b>  |              |  |                  |                    |                              |                                 |                |             |       |

- Traffic generated by the above listed developments will be added to all growth scenario traffic projections.

# Traffic Analysis

- Analysis Years
  - Existing Year = 2022
  - 5-year horizon = 2027
  - 15-year horizon = 2037
  - 25-year horizon = 2047

# Intersection Analysis

- Increase in traffic volumes
  - for the low-, medium-, and high-growth scenarios; and
  - for the five (5), 15, and 25-year time horizons
- Intersection capacity analysis (intersection levels of service and intersection control delays)
  1. Dresden Dr at Peachtree Rd
  2. Dresden Dr at Apple Valley Rd
  3. Dresden Dr at Ellijay Dr
  4. Dresden Dr at Caldwell Rd
  5. Dresden Dr at Clairmont Rd

*Note: Intersection capacity analysis will be performed at the above 5 critical intersections along Dresden Dr to calculate intersection levels of service and vehicular delays. At all other intersections, the traffic analysis will calculate increases in traffic due to growth in traffic generated by the identified developments.*

# Roadway Segment Analysis

- Increase in traffic volumes
  - for the low-, medium-, and high-growth scenarios; and
  - for the five (5), 15, and 25-year time horizons

# Types of Recommendations

- Improvements based on most likely growth scenario (medium)
  - Intersection improvements by mode of travel (i.e., vehicular operations, pedestrian operations, bicycle operations)
  - Intersection turn restrictions
  - One-way or two-way conversions
- Considerations associated with the other two, less likely growth scenarios
- Considerations for bicycle facilities, including trade-offs related to narrowing lanes and removal of on-street parking.

*Note: Given that the City of Brookhaven has committed to updating the current Bicycle, Pedestrian and Trail Plan in the near future, the scope for this study does not include a corridor-wide assessment of bicycle facilities or bicycle needs along Dresden Drive. Therefore, this study will develop considerations for bicycle facilities and not recommendations for implementation.*

# Deliverables

- Updated traffic study
  - Traffic volume increase for the three growth scenarios and three horizon years at the study intersections and roadway segments
  - Intersection capacity analysis (LOS and delay) at:
    1. Dresden Dr at Peachtree Rd
    2. Dresden Dr at Apple Valley Rd
    3. Dresden Dr at Ellijay Dr
    4. Dresden Dr at Caldwell Rd
    5. Dresden Dr at Clairmont Rd
  - Improvements and considerations at study intersections and roadway segments
  - Conceptual engineering drawings
    1. Dresden Dr at Apple Valley Rd
    2. Dresden Dr at Ellijay Dr
    3. Dresden Dr at Caldwell Rd
    4. Dresden Dr at Clairmont Rd

# Next Steps

- Small group meeting to discuss traffic study update assumptions – 12/13/2021
- Publish assumptions to project website – week of 12/20/2021
- New traffic counts – week of 01/24/2022
- Public meeting to present new data and assumptions – week of 02/07/2022
- Publish first draft traffic study, recommendations to project website – week of 03/14/2022
- Public meeting to present draft recommendations – week of 03/21/2022
- Publish revised draft traffic study, recommendations to project website – week of 04/25/2022
- Mayor and Council Presentation – week of 05/09/2022
- Publish final traffic study, recommendations to project website – week of 05/16/2022